**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing Of Claims:**

1.-19 (Canceled)

20. (New) A method for determining an operating state on triggering a fan motor, comprising:

operating the fan motor via a switching device;

triggering the switching device via a pulse-width-modulated triggering signal, a pulse duty factor of the triggering signal predefining a triggering state of the fan motor;

measuring as a measured variable one of a voltage potential at a node between the fan motor and the switching device and a motor current; and

determining an operating state on triggering the fan motor as a function of the measured variable and the pulse duty factor.

21. (New) The method as recited in Claim 20, further comprising:

smoothing the measured variable by low-pass filtering the measured variable.

22. (New) The method as recited in Claim 20, further comprising:

recognizing an open load fault if the voltage potential essentially corresponds to a supply voltage potential of the fan motor applied to the switching device.

23. (New) The method as recited in Claim 20, further comprising:

upon recognition of an open load fault, switching the switching device through for a specific period of time, in order to apply a maximum voltage to the fan motor, so that merely oxidized connection points are cleaned.

24. (New) The method as recited in Claim 20, further comprising:

recognizing a normal operation if the voltage potential is essentially proportional to the pulse duty factor and the voltage potential is in a defined voltage range in relation to an applied pulse duty factor.

25. (New) The method as recited in Claim 24, further comprising:

determining the defined voltage range by a measurement at a defined applied supply voltage at different pulse duty factors.

26. (New) The method as recited in Claim 24, further comprising:

recognizing an overvoltage fault if a measured voltage potential is above the defined voltage range.

27. (New) The method as recited in Claim 20, further comprising:

recognizing one of a blocking and a sluggishness of the fan motor if the motor current is outside a defined current range.

28. (New) The method as recited in Claim 27, further comprising:

determining the defined current range by a measurement at a defined applied supply voltage at different pulse duty factors.

29. (New) A control circuit for a fan motor for determining an operating state on triggering the fan motor, comprising:

a switching device having a terminal for connection to a first supply potential;

a pulse width modulation circuit for triggering the switching device using a pulse-width-modulated signal having a pulse duty factor, the fan motor being connectable between a second supply potential and the switching device;

a measuring circuit for picking up a measured variable at the switching device; and

an analyzer circuit for checking the measured variable and determining the operating state as a function of the measured variable and the pulse duty factor.

30. (New) The control circuit as recited in Claim 29, further comprising:

a filter circuit for smoothing the measured variable in such a way that the measured variable is essentially proportional to the pulse duty factor.

31. (New) The control circuit as recited in Claim 29, further comprising:

a compensating circuit including a data memory and for performing a compensation of the control circuit, the compensating circuit being connected to the measuring circuit in order to

measure a reference variable at a defined applied supply voltage and store the reference variable as reference values in relation to the particular pulse duty factor.

32. (New) The control circuit as recited in Claim 31, wherein the compensating circuit stores further reference values in the data memory, the compensating circuit determining the further reference values from interpolation of the measured reference values.

33. (New) The control circuit as recited in Claim 31, wherein:

the analyzer circuit checks the measured variable to determine the operating state by comparing the measured variable to the reference values stored in the data memory in regard to the particular pulse duty factor, and

the operating state is recognized as a function of a deviation between the measured variable and the reference variable.

34. (New) The control circuit as recited in Claim 29, further comprising:

a data interface for transmitting the operating state over a network.

35. (New) The control circuit as recited in Claim 29, wherein the measuring circuit measures a voltage between the fan motor and the switching device.

36. (New) The control circuit as recited in Claim 29, wherein the measuring circuit measures a motor current through the fan motor.

37. (New) The control circuit as recited in Claim 36, wherein the switching device includes a sense FET to measure the motor current through the fan motor.

38. (New) The control circuit as recited in Claim 37, further comprising:

a transformer circuit to which is connected the sense FET, wherein the transformer circuit converts a motor current into a proportional voltage that is provided to the measuring circuit.